



**U S Army Corps
of Engineers**
Huntington District

Public Notice

In reply refer to Public Notice No.

LRH-2008-932-TUS

Issuance Date:

DEC 12 2008

Stream:

Little Stillwater Creek

Closing Date:

JAN 12 2009

Please address all comments and inquiries to:

U.S. Army Corps of Engineers, Huntington District

ATTN: CELRH-OR-F Public Notice No. (*reference above*)

502 Eighth Street

Huntington, West Virginia 25701-2070

Phone: (304) 399-5210

PUBLIC NOTICE: The purpose of this public notice is to inform you of a proposal for a stream and wetland mitigation bank, submitted in accordance with 33 CFR Part 332 Compensatory Mitigation for Losses of Aquatic Resources, effective date June 9, 2008. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

REGULATORY PROGRAM: Since its early history, the U.S. Army Corps of Engineers (Corps) has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the Corps Regulatory Program.

SECTION 10: The Corps is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate all work or structures in or affecting the course, condition or capacity of navigable waters of the United States (U.S.). The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

SECTION 404: The Corps is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the discharge of dredged and fill material into all waters of the United States, including wetlands. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

TO WHOM IT MAY CONCERN: The following mitigation bank prospectus has been submitted for an evaluation of its potential to provide compensatory mitigation for activities authorized by Department of the Army (DA) permits pursuant to the above referenced sections of law.

SPONSOR: Ohio Wetlands Foundation
1220 Stone Run Court
Lancaster, Ohio 43130

LOCATION: The 84 acre property is located south of U.S. 250 in Franklin Township, Harrison County, Ohio. Latitude 40.367 Longitude -81.243.

DESCRIPTION OF PROPOSED WORK: The sponsor has submitted a prospectus to the Huntington District Corps of Engineers and the other members of the regional Interagency Review Team (IRT) to develop and operate a wetland mitigation bank.

Mitigation banks are defined as a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing compensatory mitigation for impacts authorized by DA permits pursuant to Section 10 of the Rivers and Harbors Act of 1899 and/or Section 404 of the Clean Water Act. In general, units of restored, established, enhanced, or preserved wetlands or streams are expressed as “credits” which may subsequently be withdrawn to offset “debits” incurred at a project development site. The Corps is responsible for authorizing the use of a particular mitigation bank on a project-specific basis and determining the number and availability of credits required to compensate for proposed impacts. Decisions rendered by the Corps will fully consider all comments submitted as part of the permit evaluation process.

The objective of the proposed mitigation bank is to institute an ecologically sound, well-developed and feasible wetland restoration plan that would generate credits to be used as compensatory mitigation for activities authorized by DA permits. Plans include the restoration of 29.8 acres of a forested wetlands and 32.1 acres of emergent and scrub/shrub wetlands. In addition, the proposal would provide for the enhancement of 6 acres of emergent, wet meadow and scrub/shrub wetlands and 11.2 acres of partially wooded buffer along Little Stillwater Creek. The proposed service area would be the Tuscarawas River (8-digit HUC 05040001) for the Huntington District and the Little Beaver, Yellow and Cross Creeks (8-digit HUC 05030101); Shenango River (8-digit HUC 05030102); Mahoning River (8-digit HUC 05030103); Ohio River Tributaries (Short, Wheeling and McMahan Creeks/8-digit HUC 05030106) and Little Muskingum River, Sunfish Creek and Ohio River (11-digit HUC 05030201010) in the Pittsburg District.

The proposed wetland bank site is located on an 80.4 acre property owned by Harrison County and consists of successional woods, upland old fields, agricultural fields, wet meadows and lowland woods. Caneadea silty clay loam, a hydric soil, is mapped for the entire site. The hydrology for the site is predominantly controlled by subsurface drain tiles which flow to Little Stillwater Creek along the western property boundary. Remnants of the original creek meanders are present on the property.

The sponsor proposes to re-establish a minimum of 61.9 acres of wetlands (29.8 acres of forested wetlands and 32.1 acres of emergent/wet meadow and scrub/shrub wetlands) through the construction of two embankments, micro-topography restoration, disruption of existing subsurface tiles and supplemental plantings of native vegetation. The enhancement of 6 acres of wetlands would be accomplished by crushing all drain tiles to restore hydrology to the area and recreating microtopography.

Wetland credits would be sold on a 0.10 acre basis and are proposed to be issued at a 1:1 ratio for restored wetlands; 1:2 ratio for enhanced wetlands and 1:4 ratio for enhanced riparian buffer along Little Stillwater Creek. The Ohio Wetlands Foundation would be responsible for the successful development of the wetland bank including monitoring and reporting requirements. Mr. Vince Messerly, the President of the organization, has previous experience in constructing restoration projects. The Ohio Department of Natural Resources-Division of Wildlife (DOW) would manage and maintain the site in perpetuity through an environmental covenant or environmental easement to be jointly held by the DOW and Harrison County.

Post-restoration monitoring would be conducted every two years for ten years and would include assessments of wetland plant composition and cover, habitat development, hydrologic conditions and wildlife. Vegetation Index of Biotic Integrity assessments would be conducted within the restored wetland area and included in the monitoring reports. Evaluation of the presence of invasive species throughout the site would be included in the monitoring reports.

General plans, including the prospectus are attached to this notice.

HISTORIC ISSUES: The National Register of Historic Places has been consulted and it has been determined that there are no properties currently listed on the Register which would be directly affected by the proposed work. A copy of this public notice will be sent to the State Historic Preservation Office (SHPO) for their review. If we are made aware, as a result of comments received in response to this notice, or by other means, of specific archaeological, scientific, pre-historical, or historical sites or structures which might be affected by the proposed work, the District Engineer will immediately take the appropriate action necessary pursuant to the National Historic Preservation Act of 1966. Comments concerning archeological sensitivity of a project area should be based upon collected data.

ENDANGERED/THREATENED SPECIES REVIEW: The project is located within the known or historic range of the following endangered species and species of concern:

Indiana Bat
Bald Eagle

The Huntington District has consulted the most recently available information and information provided by the sponsor and has determined the proposed project may have an effect on the species listed above or designated Critical Habitat for these Federally listed species. This public notice serves as a request to the U.S. Fish and Wildlife Service for any additional information they may have on whether any listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the activity, pursuant to Section 7(c) of the Endangered Species Act of 1972 (as amended).

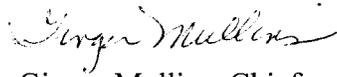
PUBLIC INTEREST REVIEW AND COMMENT: Any person who has an interest that may be adversely affected by a determination that the proposed mitigation bank has potential for providing appropriate compensatory mitigation for activities authorized by DA permits may request a public hearing. The request must be submitted in writing to the District Engineer on or

before the expiration date of this notice and must clearly set forth the interest which may be adversely affected and the manner in which the interest may be adversely affected by the activity. This proposal will be reviewed in accordance with 33 CFR 320-332, the Regulatory Program of the U. S. Army Corps of Engineers (USACE), and other pertinent laws, regulations, and executive orders. Interested parties are invited to state any objections they may have to the proposed work. The decision whether to approve this activity will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered including the cumulative effects thereof; of those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people. Written statements on these factors received in this office on or before the expiration date of this public notice will become a part of the record and will be considered in the final determination. If it is determined that the proposed mitigation bank has potential for providing appropriate compensatory mitigation for activities authorized by DA permits, the sponsor will be allowed to proceed with preparation of a draft instrument for the establishment of a mitigation bank unless its approval is found to be contrary to the public interest.

SOLICITATION OF COMMENTS: The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the potential of the proposed mitigation bank to provide appropriate compensatory mitigation for activities authorized by DA permits and to evaluate the impacts of this proposed activity. For accuracy and completeness of the administrative record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition. Any comments received will be considered by the Corps of Engineers to determine whether the proposed mitigation bank has the potential for providing appropriate compensatory mitigation for activities authorized by DA permit. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before the close of the comment period listed on page one of this Public Notice. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to: Ms. Lee A. Pittman, Project Manager, North Regulatory Section, CELRH-OR-FN, USACE Huntington District, 502 Eighth Street, Huntington, West Virginia 25701-2070. Please note names and addresses of those

who submit comments in response to this public notice become part of our administrative record and, as such, are available to the public under provisions of the Freedom of Information Act. Thank you for your interest in our nation's water resources. If you have any questions concerning this public notice, please contact Ms. Lee A. Pittman of the North Regulatory Section, at 304-399-5210.



Ginger Mullins, Chief
Regulatory Branch

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Wetlands Mitigation Bank Prospectus
Little Stillwater Wetlands Mitigation Bank
Franklin Township, Harrison County, Ohio

November 2008



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Project Sponsor



OHIO WETLANDS
 FOUNDATION

1220 Stone Run Court - PO Box 369
 Lancaster, OH 43130
 p.740.654.4016 - f.740.689.0890

Ohio Wetlands Foundation (Ohio Wetlands)

Ohio Wetlands was established in 1992 and is a private non-profit foundation (501(c)(3)) that specializes in the restoration, enhancement and preservation of wetlands habitat. The majority of its funding is received from entities required to complete compensatory wetlands mitigation in order to comply with Sections 401/404 of the Clean Water Act and Section 6111 of the Ohio Revised Code. Ohio Wetlands is also committed to providing funding for the research and education of wetlands habitat restoration and opportunities for the recreational and educational usage of the wetlands it protects, enhances and restores.

Since its inception, Ohio Wetlands has successfully completed many wetland projects throughout Ohio, including eight wetlands mitigation banks totaling over 1,200 acres of wetlands restoration and 800 acres of preserved and enhanced wetlands habitat. In addition to the wetlands mitigation projects it has completed on its own, Ohio Wetlands has provided design and/or construction oversight for the restoration of over 600 acres of wetlands for the Ohio Department of Natural Resources (ODNR) and the Columbus and Franklin County Metro Parks (Metro Parks). For each of these projects Ohio Wetlands served as the ODNR and Metro Parks project manager, overseeing the successful design, permitting and/or construction of these projects. The wetland restoration sites have served to retain and cleanse stormwater, attract wildlife and provide the public with the opportunity to learn about and enjoy wetland habitats.

Ohio Wetlands Foundation is pleased to be a major donor to the endowment recently established at The Ohio State University to ensure the ongoing operation of the Olentangy River Wetlands Research Park (ORWRP). The ORWRP, established in 1994, is the only on campus wetlands research facility in the United States and has recently been designated a RAMSAR Wetlands of International Importance.

Objectives

The proposed 84-acre Little Stillwater Wetlands Mitigation Bank (the "Project") is located in Franklin Township, Harrison County, Ohio. The Project is bounded to the north by US 250 and to the south by Little Stillwater Creek (Figures 1 & 2). The proposed mitigation bank will be constructed on land currently owned by Harrison County.

This Prospectus for the Little Stillwater Wetlands Mitigation Bank was prepared using the U.S. Army Corps of Engineers' (USACE) rule for compensatory mitigation for losses of aquatic resources. Specifically, this document complies with 33 CFR, §332.8(d)(2) of that rule.

The Little Stillwater Wetlands Mitigation Bank will be designed, constructed, and managed to attain the following objectives:

Re-establish emergent/wet meadow and scrub/shrub wetlands (32.1 acres - 1:1 credit ratio) Restoration of high quality emergent and scrub/shrub wetlands will take place through construction of two minor embankments, micro-topography restoration, disruption of existing sub-surface tiles, installation of ditch plugs, and supplemental plantings of native vegetation. This re-establishment of a high-quality wetlands ecosystem will result in a gain in aquatic resource area and functions not currently present.

Re-establish forested wetlands/uplands complex (29.8 acres - 1:1 credit ratio) Restoration of these areas will be achieved through micro-topography restoration, construction of woodland pools, disruption of existing sub-surface tiles, installation of ditch plugs, and supplemental plantings of native vegetation. This re-establishment of a high-quality wetlands ecosystem will result in a gain in aquatic resource area and functions not currently present.

Enhance emergent, wet meadow and scrub/shrub wetlands (6.0 acres - 1:2 credit ratio) Some low quality wetlands (typically Category 1 and low quality Category 2) exist throughout the site in small isolated depressions and along the old creek meander bottoms and US 250. Enhancement of these areas will take place through invasive species control, restoration of hydrology with ditch plugs, disruption of the sub-surface tile, and supplemental plantings of native vegetation. The existing plugs at the old meanders will be lowered (but not removed entirely) to allow additional hydrology to enter from Little Stillwater Creek. This enhancement of a low quality wetlands ecosystem does not result in a gain of aquatic resource area but does improve species diversity, therefore heightening, intensifying, and improving other resource functions.

Enhance riparian upland buffer (11.2 acres - 1:4 credit ratio) The existing partially-wooded buffer along Little Stillwater Creek will be enhanced through invasive species control and supplemental plantings of native vegetation.

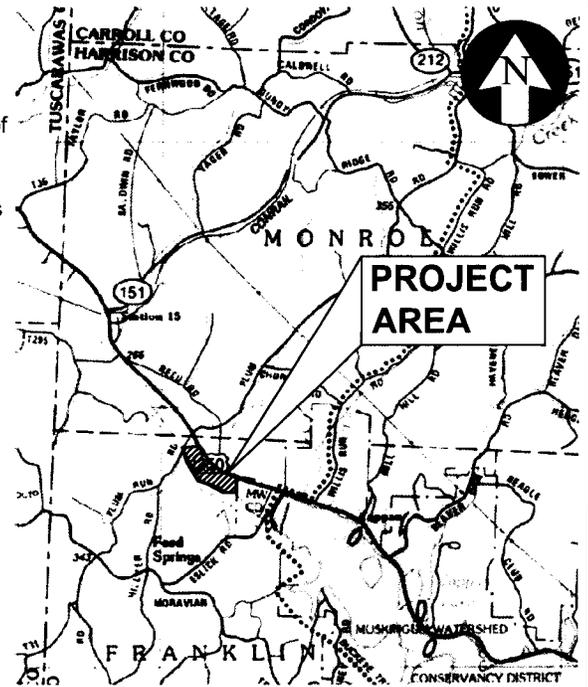


Figure 1. Location Map
1"=2miles

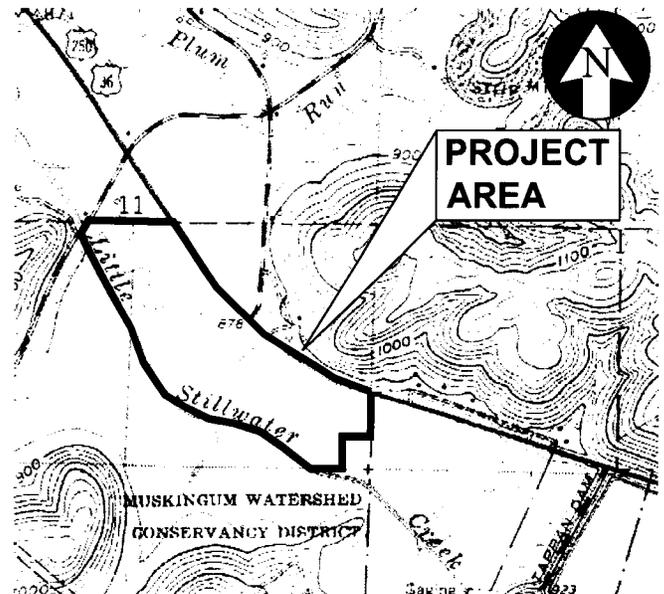


Figure 2. USGS 7.5 Minute Topographic Map
(Deersville Quadrangle)

Service Area

The current definition of "watershed" in Ohio Administrative Code (OAC) §3745-1-54 and Ohio Revised Code (ORC) §6111.02 is the 8-digit Hydrologic Map Units (or combination of 8-digit HUC's in some cases). The new Federal rule suggests using the 6- or 8-digit HUCs for service area establishment (section 332.8). Ohio EPA Wetland Water Quality Standards and Isolated Wetland Permit regulations allow impacts to Category 1 wetlands to be mitigated at any mitigation bank located within the boundaries of the the same U.S. Army Corps of Engineers District in Ohio.

Mitigation credit developed at this site will serve the mitigation needs on a case-by-case basis for applicants with projects impacting wetlands in the following USGS Hydrologic Unit Codes (HUCs):

USACE Pittsburgh District

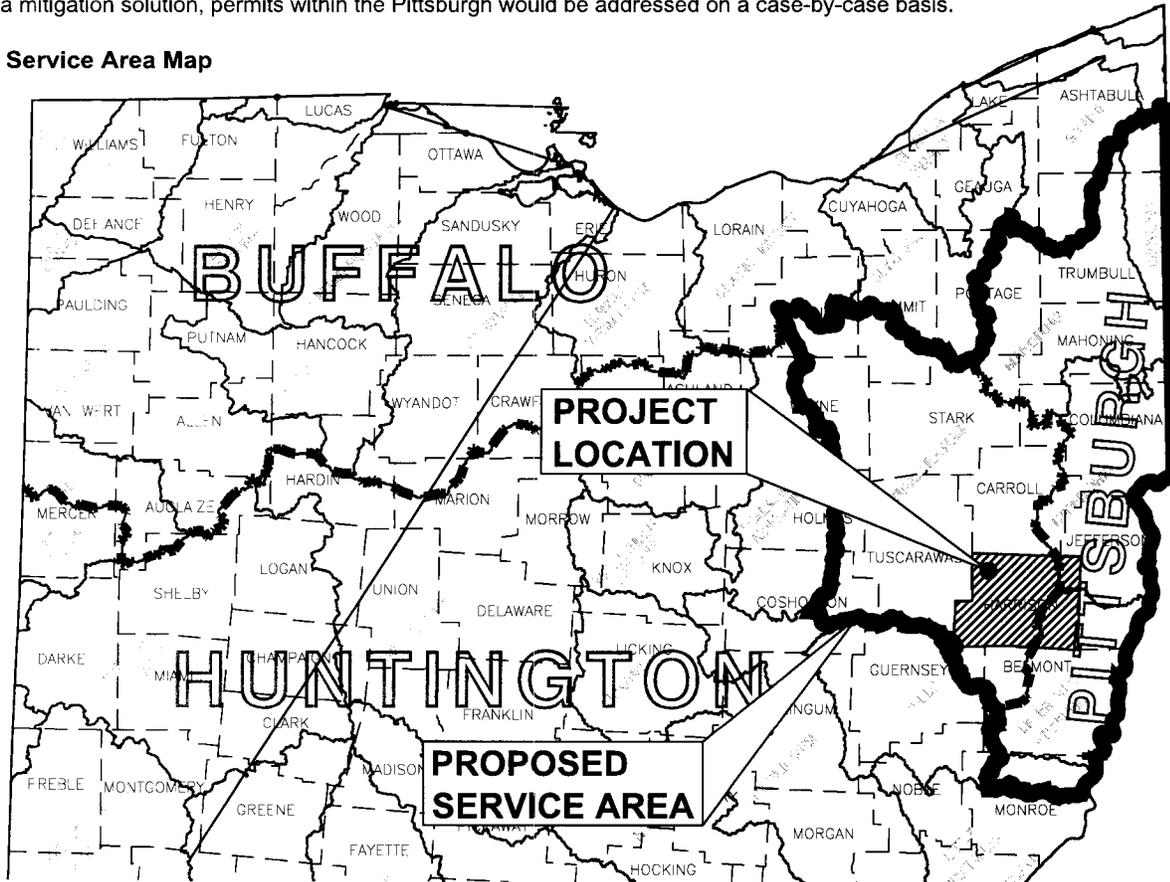
Little Beaver, Yellow, and Cross Creeks (8-digit HUC 05030101)
Shenango River (8-digit HUC 05030102)
Mahoning River (8-digit HUC 05030103)
Ohio River Tributaries (Short, Wheeling, and McMahon Creeks) (8-digit HUC 05030106)
Little Muskingum River, Sunfish Creek and Ohio River (11-digit HUC 05030201010)

USACE Huntington District

Tuscarawas River (8-digit HUC 05040001)

In addition to the Tuscarawas River 8-digit HUC, Ohio Wetlands Foundation is requesting the addition of the 8-digit HUCs located in the USACE Pittsburgh District. The Pittsburgh District lies primarily within the same Ecoregion (Western Allegheny Plateau) as the project. Given the unglaciated nature of the region, available, acceptable and successful mitigation opportunities are sparse. Similar to all permits utilizing this project as a mitigation solution, permits within the Pittsburgh would be addressed on a case-by-case basis.

Figure 3. Service Area Map



Credit Release Schedule

OWF proposes a credit release schedule that provides flexibility to the Sponsor as well as increased assurances to the Interagency Review Team in the form of a greater quantity of credits held until performance standards are achieved. The proposed credit release schedule, based upon the projected 67.7 credits generated, is as follows:

- 30% (20.3) - Released upon approval of the Banking Documents and establishment of the easements and financial assurances.
- 20% (13.5) - Released upon the completion of construction and establishment of hydrology.
- 20% (13.5) - Released upon upon completion of planting plan and demonstration that interim wetland vegetation community is becoming established (>50% non-invasive hydrophytes).
- 30% (20.3) - Released when success criteria is met or it can be demonstrated that it will be met when appropriate measures (such as VIBI, invasive species control and open water) graphed against time show an ability to meet these measures in an appropriate length of time.

Technical Approach - Baseline Information

The site lies within the Unglaciaded Upper Muskingum Basin of the Western Allegheny Plateau ecoregion. The wetland boundaries depicted within this document are based upon a wetland delineation report prepared by Davey Resource Group. The delineation report has been submitted along with this prospectus.

Topography & Hydrology

The Project is located along Little Stillwater Creek, immediately downstream of the Tappan Lake Dam (see Figures 1 & 2). Remnants of the original creek meanders still exist on the property. The entrenchment of the channelized creek along with the siltation of the original meanders has left a 3- to 4-foot elevation difference between the beds of the old meanders and the new channel.

Elevations of the agricultural field range from 866 at the north-western property line to 869 at the south-eastern extents. The fields are smooth, flat, with minor local depressions smoothed from the decades of farming. US 250, along the northern border of the property, was constructed 7 to 10 feet higher than the adjacent fields.

Site hydrology is affected by surface drainage and sub-surface drainage tiles. Many of the sub-surface drainage tiles have been located in the field with GPS and are shown on the map to the left. Drainage from the north side of US 250 is channelized and discharges from an existing culvert located at the Reed Road - US 250 intersection. Discharge from this culvert flows directly to an old creek meander via a small channelized ditch.

Vegetation

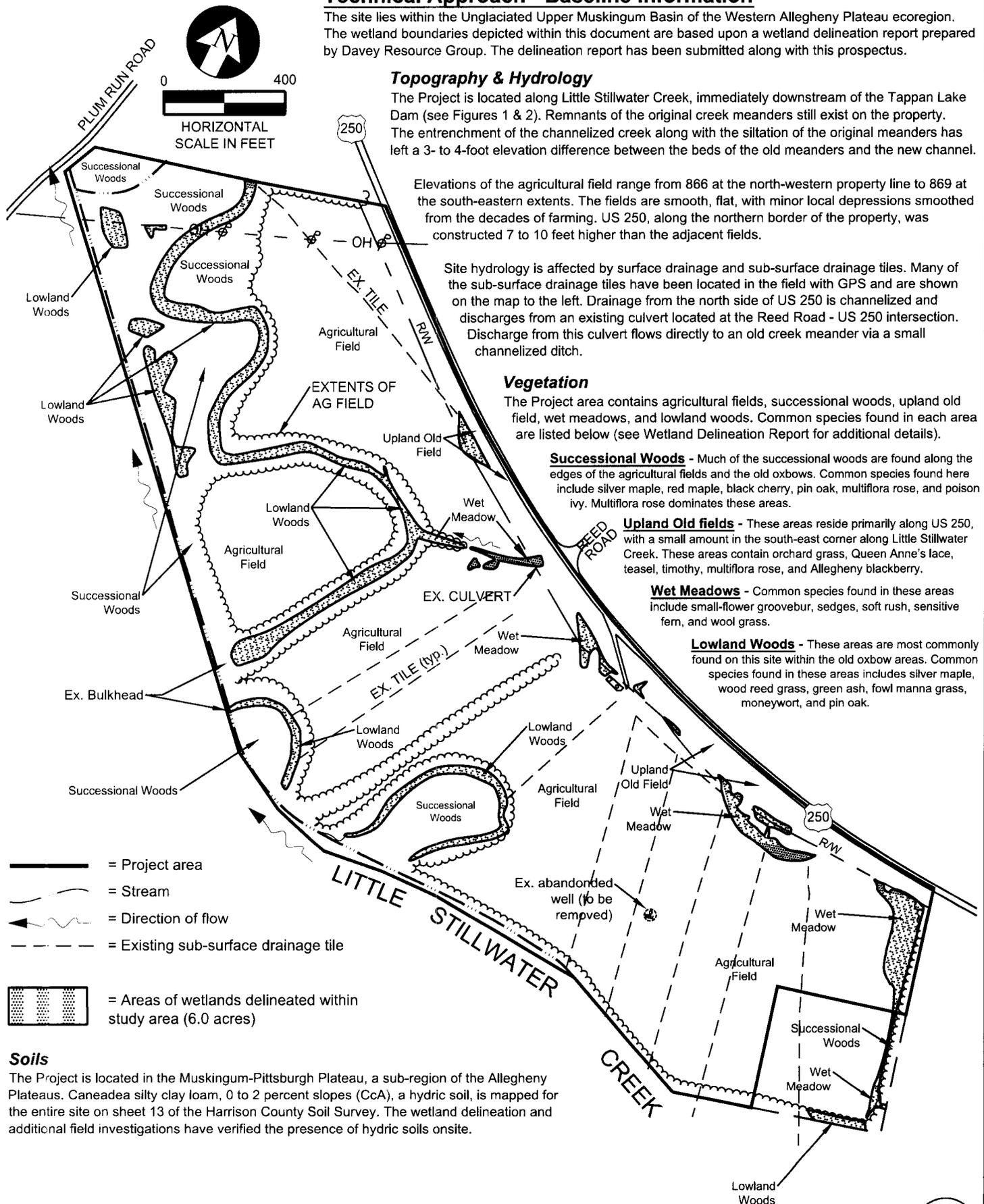
The Project area contains agricultural fields, successional woods, upland old field, wet meadows, and lowland woods. Common species found in each area are listed below (see Wetland Delineation Report for additional details).

Successional Woods - Much of the successional woods are found along the edges of the agricultural fields and the old oxbows. Common species found here include silver maple, red maple, black cherry, pin oak, multiflora rose, and poison ivy. Multiflora rose dominates these areas.

Upland Old fields - These areas reside primarily along US 250, with a small amount in the south-east corner along Little Stillwater Creek. These areas contain orchard grass, Queen Anne's lace, teasel, timothy, multiflora rose, and Allegheny blackberry.

Wet Meadows - Common species found in these areas include small-flower groovebur, sedges, soft rush, sensitive fern, and wool grass.

Lowland Woods - These areas are most commonly found on this site within the old oxbow areas. Common species found in these areas includes silver maple, wood reed grass, green ash, fowl manna grass, moneywort, and pin oak.



- = Project area
- = Stream
- = Direction of flow
- = Existing sub-surface drainage tile
- = Areas of wetlands delineated within study area (6.0 acres)

Soils

The Project is located in the Muskingum-Pittsburgh Plateau, a sub-region of the Allegheny Plateaus. Caneadea silty clay loam, 0 to 2 percent slopes (CcA), a hydric soil, is mapped for the entire site on sheet 13 of the Harrison County Soil Survey. The wetland delineation and additional field investigations have verified the presence of hydric soils onsite.

Technical Approach - Restoration Plan (see Table 2 on Sheet 6 for acreage and credit tabulations)

Re-establish emergent/wet meadow and scrub/shrub wetlands (32.1 acres, requesting 1:1 credit ratio)
 Restoration of these agricultural areas will be achieved through construction of two minor embankments (berms 1 and 2), micro-topography restoration, disruption of existing sub-surface tiles, installation of ditch plugs, and supplemental plantings of native vegetation. The majority of these areas will be under minimal water, acreages listed in Table 1 approximate depth coverage using existing contours. Micro-topography restoration in these areas will create hummocks up to 18 inches in depth and 18 inches in height, allowing for the establishment of a variety of native plants.

Re-establish forested wetlands/uplands complex (29.8 acres, requesting 1:1 credit ratio)
 (23.3 acres) Restoration of these old field areas will be achieved through micro-topography restoration, disruption of existing sub-surface tiles, installation of ditch plugs, and supplemental plantings of native vegetation.

(7.7 acres) The restoration of these existing wooded areas will comprise a forested wetlands/upland complex that will be greater than 50% wetlands. The site will be physically manipulated to create several woodland pools encompassed by lowland and successional woods to provide habitat for amphibians. Some tree removal is expected during the manipulation of these areas; all efforts will be made to preserve larger more significant and healthy trees, ensuring adequate canopy cover over the restored woodland pools.

Enhance emergent, wet meadow, and scrub/shrub wetlands (6.0 acres, requesting 1:2 credit ratio)
 The enhancement of these low quality wetlands (typically Category 1 and low quality Category 2) will result in the permanent establishment of diverse, native plant communities. Enhancement occurs through the control of invasive species, restoration of hydrology, and supplemental plantings of native species.

The old oxbows are unable to interact with the channelized Little Stillwater Creek due to the presence of bulkheads and a bed difference of 3 to 4 feet (siltation of the oxbows and downcutting of the channelized Little Stillwater has left the oxbow beds 3 to 4 feet higher). The bulkheads will be lowered to allow a more frequent interaction.

Enhance riparian upland buffer (11.2 acres, requesting 1:4 credit ratio) - Currently Little Stillwater Creek and the old meanders are bordered by low-quality, often narrow to non-existent, buffers containing primarily invasive plant species such as multi-flora rose, and reed canary grass. Enhancement of this area will consist of invasive plant species control and supplemental plantings of native vegetation.

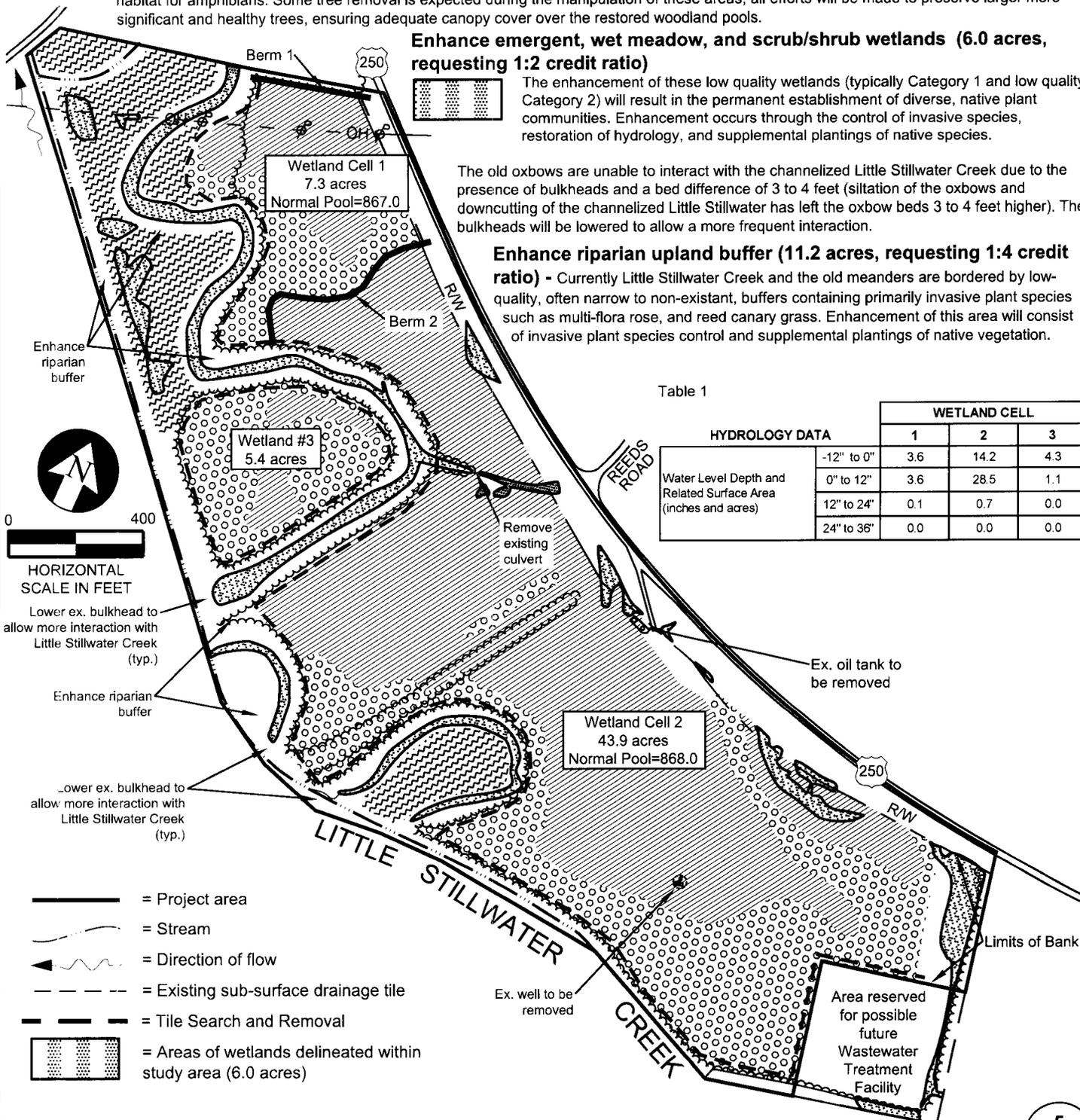


Table 1

HYDROLOGY DATA	WETLAND CELL		
	1	2	3
Water Level Depth and Related Surface Area (inches and acres)			
-12" to 0"	3.6	14.2	4.3
0" to 12"	3.6	28.5	1.1
12" to 24"	0.1	0.7	0.0
24" to 36"	0.0	0.0	0.0



HORIZONTAL SCALE IN FEET

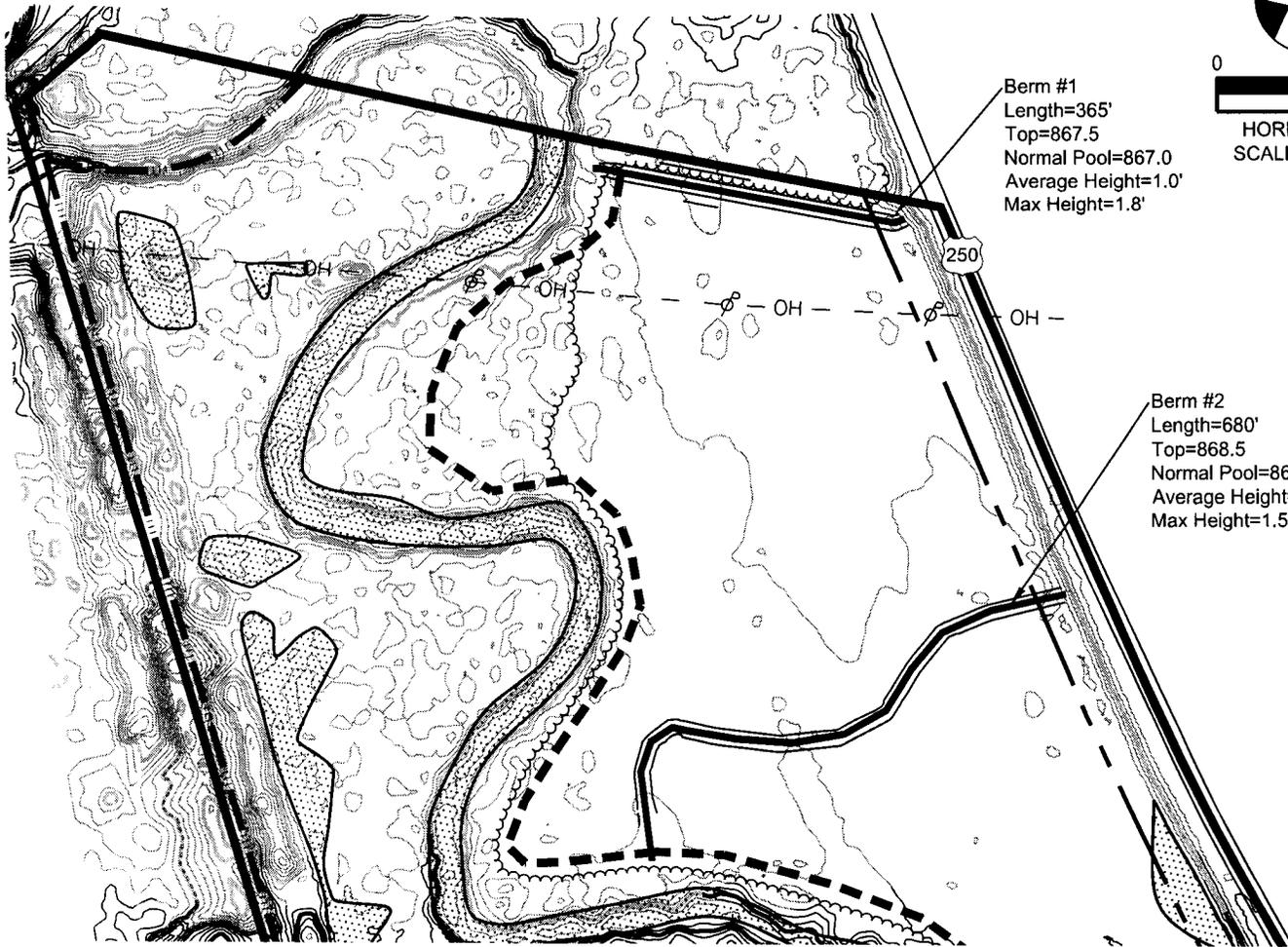
Lower ex. bulkhead to allow more interaction with Little Stillwater Creek (typ.)

Enhance riparian buffer

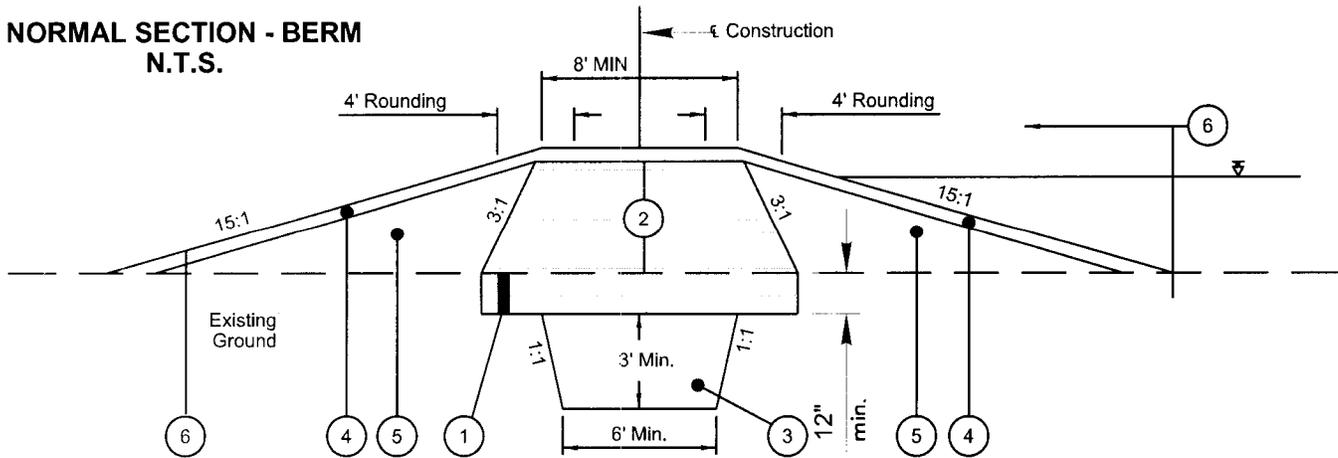
Lower ex. bulkhead to allow more interaction with Little Stillwater Creek (typ.)

- = Project area
- = Stream
- = Direction of flow
- = Existing sub-surface drainage tile
- = Tile Search and Removal
- = Areas of wetlands delineated within study area (6.0 acres)

Berm Details



NORMAL SECTION - BERM N.T.S.



LEGEND

- ① Foundation Preparation
- ② Compacted Clay Berm
- ③ Compacted Clay Core Trench
- ④ Min. 6" Topsoil, Shall Be Free of all Sod, Roots, Frozen Soil, Stones Larger than 4" Diameter, and all Other Questionable Material.
- ⑤ Compacted Topsoil Shall Be Free of all Sod, Roots, Frozen Soil, Stones Larger than 4" Diameter, and all Other Questionable Material.
- ⑥ Item 659, Seeding and Mulching

Technical Approach - Performance Criteria

The long-term goal is to develop and manage the site such that high-quality forested and scrub/shrub wetlands and marshes are restored over most of the restoration area. For the remainder of the site, the goal is to enhance a complementary blend of forested wetlands/uplands mosaic. Given the long-term nature of forest succession (multi-decadal), it is understood that a high-quality forest will not be fully developed by the end of the **TEN-YEAR** monitoring period.

1. Forested and scrub/shrub wetlands and marshes (*i.e.*, restored depressional wetlands, including swamp forest, marsh, and shrub swamp) shall meet minimum VIBI score of **51** (Category 2, Western Allegheny Plateau region). All other restored depressional wetlands (*i.e.*, wet meadows, including prairies and sedge grass communities not on slopes) will meet minimum VIBI scores of **60** (Category 2, Western Allegheny Plateau region).
2. The mitigation wetlands shall have **less than 10 percent of its total area as unvegetated open water**. Unvegetated open water is defined as permanently to regularly inundated areas where there is no or minimal emergent, rooted aquatic bed (*e.g.*, *Nuphar advena*, *Nymphaeae odorata*, *Potamogeton* spp.), or submersed or floating non-rooted aquatic bed (*e.g.*, *Utricularia* spp., *Ceratophyllum* spp., excluding species in the family *Lemnaceae*) vegetation growing in the area of inundation, but does not include inundated areas where there is a closed canopy of living trees or shrubs over the area of inundation.
3. The goal is to **re-establish 61.9 acres and enhance 6.0 acres of wetlands**. Wetlands delineations following the 1987 *Corps of Engineers Wetlands Delineation Manual* will be performed.
4. For the projected 29.8 acres of forested and scrub/shrub wetlands restoration and upland forest restoration, the goal will be to establish **100 vigorously free growing and healthy woody plants per acre**. Vigorous and healthy woody plants within the reforested areas should exhibit twig elongation and foliage typical for its species. Free growing is defined as those woody plants that have breached the existing herbaceous layer and are no longer being negatively influenced by this vegetation layer.
5. There will be **less than 5 percent areal cover of the invasive plant species** as listed in Table 3 of this document in the restored and enhanced wetland areas that are receiving mitigation credit. These species will be managed through active methods of invasive plant control as necessary.
6. There will be **at least 75 percent areal coverage of native hydrophytes within the restored wetlands**. If it appears during the monitoring period that the project is not on a strong trajectory to meet this goal, appropriate planting measures will be implemented.

Table 2. Wetland Data

(see sheet 5 for details)

DESCRIPTION	WETLAND			Creek & Oxbow	ACRES	CREDITS
	1	2	3			
Top of Berm Elevation	868.0	868.5	n/a	n/a		
Normal Pool Elev. (NP)	867.0	868.0	n/a	n/a		
Emergency Spillway Elev. (ES)	867.5	n/a	n/a	n/a		
Area	7.3	43.9	5.4	23.0		
Re-established emergent & scrub/shrub wetlands (Acres - 1:1)	3.7	27.3	1.1	0.0	32.1	32.1
Re-established forested wetlands/uplands complex (Acres - 1:1)	3.6	14.2	4.3	7.7	29.8	29.8
Enhanced emergent, wet meadow, and scrub/shrub wetlands (Acres - 1:2)	0.0	1.9	0.0	4.1	6.0	3.0
Enhanced Riparian upland buffer (Acres - 1:4)	0.0	0.0	0.0	11.2	11.2	2.8
TOTALS					79.1	67.7

Table 3. Invasive Plant Species

Species	Common Name
<i>Ailanthus altissima</i>	tree-of-heaven
<i>Alliaria petiolata</i>	garlic mustard
<i>Bromus inermis</i>	smooth brome
<i>Cirsium arvense</i>	Canada thistle
<i>Elaeagnus angustifolia</i>	Russian olive
<i>Elaeagnus umbellata</i>	autumn olive
<i>Lonicera japonica</i>	Japanese honeysuckle
<i>Lonicera maackii</i>	amur honeysuckle
<i>Lonicera morrowii</i>	Morrow honeysuckle
<i>Lonicera tartarica</i>	bush honeysuckle
<i>Lythrum salicaria</i>	purple loosestrife
<i>Myriophyllum spicatum</i>	European milfoil
<i>Najas minor</i>	lesser naiad
<i>Phalaris arundinacea</i>	reed canary grass
<i>Phragmites australis</i>	common reed
<i>Polygonum cuspidatum</i>	Japanese knotweed
<i>Potamogeton crispus</i>	curly pondweed
<i>Ranunculus ficaria</i>	lesser celandine
<i>Rhamnus cathartica</i>	European buckthorn
<i>Rhamnus frangula</i>	glossy buckthorn
<i>Rosa multiflora</i>	multiflora rose
<i>Typha x glauca</i>	hybrid cattail
<i>Typha angustifolia</i>	narrow-leaved cattail

Technical Approach - Monitoring

Because forested wetlands take many years to develop, the monitoring will be performed over a period of 10 years. Monitoring will occur 1, 3, 5, 7, and 10 years after construction. A meeting will be scheduled at the site with the Interagency Review Team (IRT) during years 3, 6, and 10 to discuss the success of the mitigation site. If all of the monitoring goals are met before the end of the 10-year period, monitoring will cease.

Monitoring protocols will follow the Integrated Wetlands Assessment Program: Part 9: Field Manual for the Vegetation Index of Biotic Integrity for Wetlands v. 1.4 (Mack, 2007). The Vegetation Index of Biotic Integrity (VIBI) is an intensive statistical wetlands monitoring methodology used by Ohio EPA at mitigation sites. The VIBI measures the ecological condition of wetlands and from that information, inferences can be made, given the vegetation and HGM classes of those wetlands, at what level they are performing their corresponding suite of functions.

Long Term Ownership and Care

The Project site is owned fee simple by Harrison County. Ohio Wetlands Foundation will be responsible for the implementation of the Project (including construction, monitoring, maintenance, and necessary remedial activities). After the successful implementation of the Project, Ohio Department of Natural Resources, Division of Wildlife (DOW) will provide long-term stewardship consistent with the terms of the Mitigation and Monitoring Plan and approved IRT Banking Instrument. The DOW, along with Harrison County, will be a signatory to the banking instrument and Environmental Covenant or Conservation Easement.

At the end of the ten-year monitoring period and after the IRT concurs that all performance goals have been met, Ohio Wetlands Foundation shall provide funding to DOW and Harrison County for long-term stewardship needs of the site.